WO 2005/068505

| <110> | HUR, Man-Wook |
|---|---|
| <120> | FUSION PROTEIN COMPRISING TATOMT POLYPEPTIDE |
| <160> | 22 |
| <170> | KopatentIn 1.71 |
| <210> | 1 |
| <211> | 36 |
| <212> | DNA |
| <213> | Artificial Sequence |
| | |
| <220> | |
| <223> | Forward primer for Constructs 2-1 and 2-2 PCR |
| | |
| | |
| <400> | 1 |
| acgtaagci | t accatggcgc cgacctcctg gaccgg 36 |
| | |
| | |
| <210× | 2 |
| • | 2 |
| <211> | 31 |
| <211> <212> | 31 DNA |
| <211> | 31 |
| <211> <212> | 31 DNA |
| <211> <212> <213> | 31 DNA Artificial Sequence |
| <211> <212> <213> | 31 DNA |
| <211> <212> <213> | 31 DNA Artificial Sequence |
| <211> <212> <213> | 31 DNA Artificial Sequence |
| <211> <212> <213> <220> <223> | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR |
| <211> <212> <213> <220> <223> | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR |
| <211> <212> <213> <220> <223> <400> gatcgaatt | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 |
| <211> <212> <213> <220> <223> <400> gatcgaatt | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 |
| <211> <212> <213> <220> <223> <400> gatcgaatt | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 3 34 |
| <211> <212> <213> <220> <223> <400> gatcgaatt <210> <211> <212> | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 3 34 DNA |
| <211> <212> <213> <220> <223> <400> gatcgaatt | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 3 34 |
| <211> <212> <213> <220> <223> <400> gatcgaatt <210> <211> <212> | DNA Artificial Sequence Reverse primer for constructs 2-1 and 2-2 PCR 2 cc ggcgagtccg gctgtgaagt t 31 3 34 DNA |

```
Reverse primer for Constructs 3-1 and 3-2 PCR
<223>
<400>
                                                                         34
gatcgaattc cgggctgggg tcgggcgccc cgcc
<210>
        4
<211>
        33
<212>
        DNA
<213>
        Artificial Sequence
<220>
<223>
        Forward primer for Constructs 4-1 or 5-1, 2
<400>
                                                                         33
acgtaagctt accatggggg acagcgacga gtc
<210>
         5
<211>
        31
<212>
        DNA
<213>
        Artificial Sequence
<220>
<223>
        Reverse primer for constructs 4-1 or 5-1, 5-2
<400>
                                                                         31
gatcgaattc ggcgagtccg gctgtgaagt t
<210>
         6
<211>
         33
<212>
         DNA
<213>
        Artificial Sequence
<220>
<223> Forward primer for 4-12FC PCR
```

| <400> | 6 | |
|------------------|----------------------------------|----|
| acgtaago | tt accatggggg acagcgacga gtc | 33 |
| | | |
| | | |
| <210> | 7 | |
| <211> | 37 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| | • | |
| <220> | | |
| <223> | Forward primer for PCR ZF only | |
| | | |
| | | |
| <400> | 7 | |
| acgtaago | tt accatggaga aggtggagaa gatccga | 37 |
| | | |
| | | |
| <210> | 8 | |
| <211> | 31 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | Reverse primer for PCR ZF only | |
| | | |
| -400 > | 0 | |
| <400> | 8 | |
| acgtaage | tt cgaggggacg ccgttgcagc c | 31 |
| | | |
| <210> | 9 | |
| <211> | 130 | |
| <212> | PRT | |
| <213> | Artificial Sequence | |
| | | |
| <220> | | |
| <223> | POZ-Domain | |

Sequence Listing

<400> 9 Met Ala Gly Gly Val Asp Gly Pro Ile Gly Ile Pro Phe Pro Asp His Ser Ser Asp Ile Leu Ser Gly Leu Asn Glu Gln Arg Thr Gln Gly Leu 25 Leu Cys Asp Val Val Ile Leu Val Glu Gly Arg Glu Phe Pro Thr His 40 Arg Ser Val Leu Ala Ala Cys Ser Gln Tyr Phe Lys Lys Leu Phe Thr 55 Ser Gly Ala Val Val Asp Gln Gln Asn Val Tyr Glu Ile Asp Phe Val 70 75 Ser Ala Glu Ala Leu Thr Ala Leu Met Asp Phe Ala Tyr Thr Ala Thr 85 90 Leu Thr Val Ser Thr Ala Asn Val Gly Asp Ile Leu Ser Ala Ala Arg 105 Leu Leu Glu Ile Pro Ala Val Ser His Val Cys Ala Asp Leu Leu Asp 120 Arg Gln 130 <210> 10 <211> 73 <212> PRT <213> Artificial Sequence <220> <223> TatdMt polypeptide <400>

Sequence Listing

Met Glu Pro Val Asn Pro Ser Leu Glu Pro Trp Lys His Pro Gly Ser 5 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Ala Lys Cys Cys Phe 25 30 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly 40 Arg Ala Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr His Gln Val Ser Leu Ser Lys Leu Ile 70 65 <210> 11 <211> 106 <212> PRT <213> Artificial Sequence <220> <223> AZF39 <220> <221> SIGNAL <222> (4)..(11) <223> NLS(Nuclear Localization Signal) <400> Met Glu Leu Pro Pro Lys Lys Lys Arg Lys Val Gly Ile Arg Ile Pro 5 Gly Glu Lys Pro Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr His Thr Gly Glu Lys Pro 35 45

Sequence Listing

Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu 50 55 Arg Arg His Gly Arg Thr His Thr Gly Glu Lys Pro Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr 90 . 85 Arg Thr His Thr Gly Glu Lys Ala Ala Ala 105 <210> 12 <211> 106 <212> PRT <213> Artificial Sequence <220> <223> AZF40 <220> <221> SIGNAL <222> (4)..(11) <223> NLS(Nuclear Localization Signal) Met Glu Leu Pro Pro Lys Lys Lys Arg Lys Val Gly Ile Arg Ile Pro 1 Gly Glu Lys Pro Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg 20 25 Ser Asp His Leu Lys Thr His Thr Arg Thr His Thr Gly Glu Lys Pro 40 45 Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu

| | 50 | | | | | 55 | | | | | 60 | | | | | | | |
|---------------|------------|--------------|------|-------|-------|------|-------|-----|------|-------|------|------|------|-------------|-------|---|---|-----|
| Arg A | Arg | His | Gly | Arq | Thr | His | Thr | Glv | Glu | Lvs | Pro | Phe | Gln | Cvs | T.v.q | | | |
| 65 | | | - | • | 70 | | | 4 | | 75 | | | | - 15 | 80 | | | |
| | | | | | | | | | | | | | | | | | | |
| Thr C | Cys | Gln | Arg | Lys | Phe | Ser | Arg | Ser | Asp | His | Leu | Lys | Thr | His | Thr | | | |
| | | | | 85 | | | | | 90 | | | | | 95 | | | | |
| | | | | | | | | | | | | | | | | | | |
| Arg I | hr | His | Thr | Gly | Glu | ьуs | Ala | Ala | Ala | | | | | | | | | |
| | | | 100 | | | | | 105 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| -210 > | | | | | | | | | | | | | | | | | | |
| <210><211> | | 13 318 | , | | | | | | | | | | | | | | | |
| <212> | | DNA | | | | | | | | | | | | | | | | |
| <213> | | | | ial | Sem | ance | | | | | | | | | | | | |
| | | | | | ougo | | • | | | | | | | | | | | |
| <220> | | | | | | | | | | | | | | | | | | |
| <223> | | AZF | 39 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| <400> | | 13 | | | | | | | * | | | | | | | | | |
| atgga | att | g c c | tcca | aaaa | a ga | agag | aaag | gta | ggga | tcc | gaat | tccc | gg g | gaaa | aacc | g | | 6(|
| | | | | | | | | | | | | | | | | | | |
| ttcca | gtg. | ta a | aact | tgtc | a gc | gaaa | gttc. | tcc | cggt | ccg | acca | cctg | aa g | accc | acac | c | : | 120 |
| | . : | | | | | | | | | | | | | | | | | |
| aggac | tca | ta c | cggg | gaaa | a ac | cgta | taaa | tgt | aagc | aat | gtgg | gaag | gc t | tttg | gatg | t | 1 | 180 |
| ccctc | aaad | ac + | tcaa | adde | 2 ta | .a | | 020 | 2000 | | | | | | | | _ | |
| ccctc | | | cogu | agge | a cy | gaag | yacı | Cac | accy | 999 | aaaa | accg | tt c | cagt | gtaa | a | 2 | 24(|
| acttg | tcad | ge q | aaag | ttct | e ee | aatc | cgac | cac | ctga | ana . | ccca | cacc | aa a | acto | 2+20 | • | - | |
| - | • | | • | | | J J | - 3 | - | | ugu | 0000 | 0000 | ag g | accc | acacı | C | 3 | 300 |
| ggtgaa | aaaa | ag c | ggcc | gca | | | | | | | | | | | | | 3 | 18 |
| | | | | | | | | | | | | | | | | | • | |
| | | | | | | | | | | | | | | | | | | |
| <210> | | 14 | | | | | | | | | | | | | | | | |
| <211> | | 318 | | | | | | | | | | | | | | | | |
| <212> | | DNA | | | | | | | | | | | | | | | | |
| <213> | | Art. | ific | ial S | Seque | ence | | | | | | | | | | | | |

Sequence Listing

| <220> | | | | | | |
|---------------------------------------|---------------|------------|------------|-------------|------------|-------|
| <223> | AZF40 | | | | | |
| | | | | | | |
| | | | • | | | |
| <400> | 14 | | | | | |
| atggaatt | gc ctccaaaaaa | gaagagaaag | gtagggatcc | gaattcccgg | ggaaaaaccg | 60 |
| ttccagtg | a asacttatos | acassaatta | tassastass | 200200 | | |
| o o o o o o o o o o o o o o o o o o o | a aaacttgtca | gcgaaagttc | teeeggteeg | accacctgaa | gacccacacc | 120 |
| aggactcat | a ccggggaaaa | accgtataaa | tgtaagcaat | ataggaaaggc | ttttaaatat | 180 |
| | | - | , , | J-JJJ | ooooggacgc | . 100 |
| ccctcaaac | c ttcgaaggca | tggaaggact | cacaccgggg | aaaaaccgtt | ccagtgtaaa | 240 |
| | | | | | | |
| acttgtcag | c gaaagttctc | ccggtccgac | cacctgaaga | cccacaccag | gactcatacc | 300 |
| | | | | | | |
| ggtgaaaa | ig cggccgca | | | | | 318 |
| | | | | | | |
| <210> | 15 | | | | | |
| | 219 | | | | | |
| | DNA | | | | | |
| | Artificial Se | eguence | | | | |
| | | - 4 | | | | |
| <220> | | | | | | |
| <223> | TatdMT | | | | | |
| | | | | | | |
| | | | | | | |
| | 15 | | | | | |
| atggagcca | g taaatcctag | cctagagccc | tggaagcatc | caggaagtca | gcctaaaact | 60 |
| | | | | | | |
| gcttgtacc | a attgctattg | tgcaaagtgt | tgctttcatt | gccaagtttg | tttcataaca | 120 |
| 2226644 | | | | | | |
| aaayuutta | g gcatctccta | rggcagggca | aagcggagac | agcgacgaag | acctcctcaa | 180 |
| agcagteag | a ctcatcaagt | ++c+c+=+a= | 2200t~2±2 | | | |
| , , , coag | - occurracy | ciciciatia | aayuugate | | | 219 |
| | | | | | | |
| -010 | • - | | | | | |

<211>

<212>

390

DNA

| | | | | quenc | e | | | | | | | | | | |
|-----------|--------|--------|-------------|-------|--------|------|------|------|-----|------|-----|------|------|-----|----|
| <220> | | | | | | | | | | | | | | | |
| <223> | POZ-I | Pomain | n | | | | | | | | | | | | |
| <400> | 16 | | | | | | | | | | | | | | |
| atggeegge | g geg | rtggad | egg d | ccca | tegg | g at | cccg | ttcc | ccg | acca | cag | cago | gac | atc | 6 |
| ctgagtggg | jc tga | acgaç | gca d | gcgga | .cgcag | g gg | cctg | ctgt | gcg | acgt | ggt | gato | ctg | gtg | 12 |
| gagggccgc | g agt | tecco | cac q | gcacc | gctco | g gt | gctg | gccg | cct | gcag | cca | gtac | tte | aag | 18 |
| aagctgtto | a cgt | cgggc | ege d | gtgg | tggac | c ca | gcag | aacg | tgt | acga | gat | cgac | tte | gtc | 24 |
| agcgccgag | ıg ege | tcaco | ege e | gctca | tggad | : tt | cgcc | taca | cgg | ccac | gct | cacc | gtca | agc | 30 |
| acagccaac | g tgg | gtgac | at c | ctca | gegee | gc | ccgc | ctgc | tgg | agat | ccc | agaa | gtga | agc | 36 |
| cacgtgtgc | g ccg | accto | et <u>c</u> | gacc | ggcag | ſ | | | | | | | | | 39 |
| | | | | | | | | | | | | | | | |
| <210> | 17 | | | | | | | | | | | | | | |
| <211> | 181 ' | | | | | | | | | | | | | | |
| <212> | PRT | | | | | | | | | | | | | | |
| <213> | Artif | icial | . Seq | luenc | е | | | | | | | | | | |
| <220> | | | | | | | | | | | | | | | |
| <223> | AZF39 | -Tatd | Mt | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| <400> | 17 | | | | | | | | | | | | | | |
| Met Glu L | eu Pr | o Pro | Lys | Lys | Lvs | Ara | Lvs | Val | Glv | Ile | Arσ | Tle | Pro | , | |
| 1 | | 5 | | • | • | | 10 | | , | | 5 | 15 | | | |
| | | | | | | | | | | | | | | | |
| Gly Glu L | | | Gln | Cys | Lys | | Сув | Gln | Arg | Lys | | Ser | Arg | Ī | |
| | 2 | U | | | | 25 | | | | | 30 | | | | |
| Ser Asp H | is Le | u Lys | Thr | His | Thr : | Arg | Thr | His | Thr | Gly | Glu | Lys | Pro | • | |
| | 35 | | | | 40 | | | | | 45 | | - | | | |

Sequence Listing

Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu 55 Arg Arg His Gly Arg Thr His Thr Gly Glu Lys Pro Phe Gln Cys Lys 65 70 Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr 90 Arg Thr His Thr Gly Glu Lys Ala Ala Ala Asp Ile Met Glu Pro Val 100 105 110 Asn Pro Ser Leu Glu Pro Trp Lys His Pro Gly Ser Gln Pro Lys Thr 120 Ala Cys Thr Asn Cys Tyr Cys Ala Lys Cys Cys Phe His Cys Gln Val 135 140 Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Ala Lys Arg 150 155 Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr His Gln Val Ser 165 170 175 Leu Ser Lys Leu Ile 180 <210> 18 <211> 181 <212> PRT <213> Artificial Sequence <220> <223> AZF40-TatdMt <400> 18

Met Glu Leu Pro Pro Lys Lys Lys Arg Lys Val Gly Ile Arg Ile Pro

| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
|--------------|------------|------------|------------|------------------|------------|------------|------------|------------|------------|------------|--------------------|------------|------------|------------|------------|
| Gly | Glu | Lys | Pro 20 | Phe | Gln | Cys | Lys | Thr 25 | Cys | Gln | Arg | Lys | Phe 30 | Ser | Arg |
| Ser | Asp | His 35 | Leu | Lys | Thr | His | Thr 40 | Arg | Thr | His | Thr | Gly 45 | Glu | Lys | Pro |
| Tyr | Lys 50 | Cys | Lys | Gln | Cys | Gly 55 | Lys | Ala | Phe | Gly | С у в 60 | Pro | Ser | Asn | Leu |
| Arg 65 | Arg | His | Gly | Arg | Thr 70 | His | Thr | Gly | Glu | Lys 75 | Pro | Phe | Gln | Cys | Lys 80 |
| Thr | Cys | Gln | Arg | Lys 85 | Phe | Ser | Arg | Ser | Asp 90 | His | Leu | Lys | Thr | His 95 | Thr |
| Arg | Thr | His | Thr 100 | Gly | Glu | Lys | Ala | Ala 105 | Ala | Asp | Ile | Met | Glu 110 | Pro | Val |
| Asn | Pro | Ser 115 | Leu | Glu | Pro | Trp | Lys 120 | His | Pro | Gly | Ser | Gln 125 | Pro | Lys | Thr |
| Ala | Cys 130 | Thr | Asn | Cys | туг | Cys 135 | Ala | Lys | Cys | Cys | Phe 140 | His | Cys | Gln | Val |
| Cys 145 | Phe | Ile | Thr | Lys | Ala 150 | Leu | Gly | Ile | Ser | Туr 155 | Gly | Arg | Ala | Lys | Arg 160 |
| Arg | Gln | Arg | Arg | Arg 165 | Pro | Pro | Gln | Gly | Ser 170 | Gln | Thr | His | Gln | Val 175 | Ser |
| Seu | Ser | Lys | Leu 180 | Ile | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 210 | | 19 | | | | | | | | | | | ٠ | | |
| 211 212 | | 313 PRT | | | | | | | | | | | | | |
| .212 :213 | | | ific | ial | Sam. | 0000 | | | | | | | | | |
| | - | 23± C | | -41 | neda | ence | | | | | | | | | |

| <22 | 20> | | | | | | | | | | | | | | |
|----------|-------------|-----|------|------|------|------|------|------|---------|------|------|----------|-------|---------|--------|
| <22 | !3> | PO | Z-Do | main | -AZF | 39-т | atdM | t | | | | | | | |
| | | | | | | | | _ | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| <40 | | 19 | | | | | | | | | | | | | |
| Met | : Ala | Gly | Gly | Val | Asp | Gly | Pro | Ile | Gly | Ile | Pro | Phe | Pro | Asp | His |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| | | | | | | | | | | | | | | | |
| Ser | Ser | Asp | Ile | Leu | Ser | Gly | Leu | Asn | Glu | Gln | Ara | Thr | Gln | Glv | Leu |
| | | - | 20 | | | • | | 25 | | | 5 | | | 1 | |
| | | | 20 | | | | | 23 | | | | | 30 | | |
| _ | _ | _ | | | | _ | | | | | | | | | |
| Leu | Cys | Asp | Val | Val | Ile | Leu | Val | Glu | Gly | Arg | Glu | Phe | Pro | Thr | His |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| | | | | | | | | | | | | | | | |
| Arg | Ser | Val | Leu | Ala | Ala | Cys | Ser | Gln | Tyr | Phe | Lys | Lys | Leu | Phe | Thr |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| | | | | | | | | | | | | | | | |
| Ser | Gly | Ala | ۷al | Val | Asp | Gln | Gln | Δen | Val | Фуу | Glu | Tla | 7.00 | Pho | 17 n T |
| 65 | | | | | 70 | 0 | | | • • • • | | 014 | 110 | nap | FIIC | |
| 0.5 | | | | | 70 | | | | | 75 | | | | | 80 |
| _ | | | | | | | | | | | | | | | |
| Ser | Ala | Glu | Ala | Leu | Thr | Ala | Leu | Met | Asp | Phe | Ala | Tyr | Thr | Ala | Thr |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| | | | | | | | | | | | | | | | |
| Leu | Thr | Val | Ser | Thr | Ala | Asn | Val | Gly | Asp | Ile | Leu | Ser | Ala | Ala | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | Ī |
| | | | | | | | | | | | | | | | |
| Len | Leu | Glu | Tle | Pro | פומ | ₩a1 | Sar | uic. | 1701 | Cvro | 71 n | 7 | T 011 | T 0 | N |
| | 200 | | 116 | | nia | Val | | nrs | Val | Cys | ALG | | nea | Ten | Asp |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| | | | | | | | | | | | | | | | |
| Arg | Gln | Gly | Tyr | Met | Glu | Leu | Pro | Pro | Lys | Lys | Lys | Arg | Lys | Val | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| | | | | | | | | | | | | | | | |
| Ile | Arg | Ile | Pro | Gly | Glu | Lvs | Pro | Phe | Gln | Cvs | Lvs | Thr | Cvs | Gln | Ara |
| 145 | | | | | 150 | | | | | | -,- | | -,, | · · · · | - |
| | | | | | 130 | | | | | 155 | | | | | 160 |
| T | 53 2 | ۵. | _ | _ | | | _ | _ | | | _ | | | | |
| тув | Phe | ser | Arg | | Asp | Hís | Leu | ГÀЗ | Thr | His | Thr | Arg | Thr | His | Thr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| | | | | | | | | | | | | | | | |
| Gly | Glu | Lys | Pro | Tyr | Lys | Cys | Lys | Gln | Cys | Gly | Lys | Ala | Phe | Gly | Cys |

Sequence Listing

180 185 190 Pro Ser Asn Leu Arg Arg His Gly Arg Thr His Thr Gly Glu Lys Pro 200 Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr His Thr Gly Glu Lys Ala Ala Ala Asp Ile 230 235 Met Glu Pro Val Asn Pro Ser Leu Glu Pro Trp Lys His Pro Gly Ser 245 250 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Ala Lys Cys Phe 265 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly 280 Arg Ala Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr 295 His Gln Val Ser Leu Ser Lys Leu Ile 310 <210> 20 <211> 313 <212> <213> Artificial Sequence <220> <223> POZ-Domain-AZF40-TatdMt <400>

Met Ala Gly Gly Val Asp Gly Pro Ile Gly Ile Pro Phe Pro Asp His

10

| Ser | Ser | Asp | Ile 20 | Leu | Ser | Gly | Leu | Asn 25 | Glu | Gln | Arg | Thr | Gln 30 | Gly | Leu | |
|------------|------------|------------|------------|------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
| Leu | Cys | Asp 35 | Val | Val | Ile | Leu | Val 40 | Glu | Gly | Arg | Glu | Phe 45 | Pro | Thr | His | |
| Arg | Ser 50 | Val | Leu | Ala | Ala | Суs 55 | Ser | Gln | туг | Phe | Lys 60 | Lys | Leu | Phe | Thr | |
| Ser 65 | Gly | Ala | Val | Val | Asp 70 | Gln | Gln | Asn | Val | Tyr 75 | Glu | Ile | Asp | Phe | Val 80 | |
| Ser | Ala | Glu | Ala | Leu 85 | Thr | Ala | Leu | Met | Asp 90 | Phe | Ala | Tyr | Thr | Ala 95 | Thr | |
| Leu | Thr | Val | Ser 100 | Thr | Ala | Asn | Val | Gly 105 | Asp | Ile | Leu | Ser | Ala 110 | Ala | Arg | |
| Leu | Leu | Glu 115 | Ile | Pro | Ala | Val | Ser 120 | His | Val | Cys | Ala | Asp 125 | Leu | Leu | Asp | |
| Arg | Gln 130 | Gly | Thr | Met | G _. lu | Leu 135 | Pro | Pro | ГÀЗ | Lys | Lys 140 | Arg | Lys | Val | Gly | |
| Ile 145 | Arg | Ile | Pro | Gly | Glu 150 | ГÀЗ | Pro | Phe | Gln | Cys 155 | Lys | Thr | Cys | Gln | Arg 160 | |
| Lys | Phe | Ser | Arg | Ser 165 | Asp | His | Leu | Lys | Thr 170 | His | Thr | Arg | Thr | His 175 | Thr | |
| Gly | Glu | Lys | Pro 180 | Tyr | Lys | Cys | ГÀЗ | Gln 185 | Cys | Gly | Lys | Ala | Phe 190 | Gly | Cys | |
| Pro | Ser | Asn 195 | Leu | Arg | Arg | His | Gly 200 | Arg | Thr | His | Thr | Gly 205 | Glu | Lys | Pro | |
| Phe | Gln 210 | Суз | Lys | Thr | Сув | Gln 215 | Arg | Lys | Phe | Ser | Arg 220 | Ser | Asp | His | Leu | |
| Гуз | Thr | His | Thr | Arg | Thr | His | Thr | Gly | Glu | Lys | Ala | Ala | Ala | Asp | Ile | |

Sequence Listing

225 230 235 240 Met Glu Pro Val Asn Pro Ser Leu Glu Pro Trp Lys His Pro Gly Ser 245 250 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Ala Lys Cys Phe 265 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly 280 Arg Ala Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr 295 300 His Gln Val Ser Leu Ser Lys Leu Ile 310 <210> <211> <212> DNA <213> Artificial Sequence <220> <223> Forward primer for pcDNA3.0-artificial zinc-finger fusion TatdMt constructs <400> gatcggtacc atggaattgc ctccaaaaaa gaag 34 <210> 22 <211> 34 <212> <213> Artificial Sequence <220> Reverse primer for pcDNA3.0-artificial zinc-finger fusion TatdMt <223> constructs

Sequence Listing

<400> 22

gatcgatatc tgcggccgct ttttcaccgg tatg

34